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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/058,952 | 01/28/2002 | Peter Holemans | 38190/239691 | 4630 |

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EXAMINER

BINDA, GREGORY JOHN

| | |
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| ART UNIT | PAPER NUMBER |
|----------|--------------|

3679

DATE MAILED: 06/18/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

SK

Office Action Summary

Application No.
10/058,952

Applicant(s)
Holemans et al

Examiner
Greg Binda

Art Unit
3679



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on May 6, 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above, claim(s) 17-24 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Jan 28, 2002 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 2 6) ☐ Other:

Art Unit: 3679

Election/Restriction

1. Applicant's election of a shaft (Group I) in Paper No. 4 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 17-24 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election of a shaft (Group I) was made without traverse in Paper No. 4.

Drawings

3. The drawings are objected to as failing to comply with
 - a. 37 CFR 1.83(a) because they do not show:
 - i. The reinforcing fibers oriented in a direction perpendicular to the axis of the annular body as recited in claims 7 & 15
 - ii. The filler material recited in claims 8 and 9 and described on page 7, lines 5 & 6 and page 8, lines 3-5 & 32.
 - iii. The reinforcing fibers extending about a lobe as recited in claims 14 & 16.
 - b. 37 CFR 1.84(p)(5) because they do not include reference numerals 50 & 54 mentioned in the description on page 11, lines 7 & 18.

Art Unit: 3679

4. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

5. The specification is objected to as failing to comply with 37 CFR 1.71 and 1.75(d)(1) because the detailed description fails to provide proper antecedent basis for the claimed subject matter, "said annular body and said plurality of ribs made of organic and inorganic materials". In the specification at page 8, line 22, the annular body and the plurality of ribs are describe as being made by either organic OR inorganic materials, not both.

Claim Objections

6. Claim 8 is objected to because it is not clear if the "interstices" recited in line 2 are the same as, or different from the voids recited in claim 1, line last. See also "interstices or voids" on page 8, lines 1 & 2 of the description.

Claim Rejections - 35 U.S.C. § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 3679

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Williams, US 5,097,870. Fig. 1 shows a damage tolerant shaft comprising: an annular body 8 symmetrical about an axis; and a plurality of ribs 6 extending inwardly from the annular body 8 and connecting within the interior of the annular body 8, wherein the annular body 8 and the plurality of ribs 6 cooperate to define voids 7. In col. 3, lines 30 & 31 Williams discloses that the annular body and the plurality of ribs is made of organic and inorganic materials. Fig. 7 shows that the plurality ribs includes a plurality of reinforcing fibers (see also col. 5, lines 24 & 25) oriented in a direction perpendicular to the axis about which the annular body is symmetrical. Fig. 1 shows filler material 4 disposed in the voids 7 and an outer layer 10 surrounding annular body. In col. 2, lines 65+, Williams discloses that the outer layer includes fibers perpendicular to the axis since the outer layer of the annular body also includes the outermost portion of the body 8.

9. Claims 1-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Quigley et al, US 5,888,601. Fig. 12 shows a damage tolerant shaft comprising a composite material annular body 204 and a plurality of ribs 204a. Fig. 13 shows filler material 206b. In col. 2, lines 19-25, the composite material is disclosed as including fibers oriented perpendicular to the axis of the shaft.

Art Unit: 3679

10. Claims 1, 2, 4-6, 8-13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by any one of Bradley, US 2,340,926; Hamilton, US 4,374,881; and Fernez, FR 964,069

11. Claims 1-6 & 8-13 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Witort et al, US 3,110,754.

12. Claims 1-6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by FR 617,257.

13. Claims 1, 3 & 5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by any one of Schneider, DT 681 109; Sipe et al, US 1,844,231; Weatherwax et al, US 2,929,408; Robinson, US 1,930,285; Maxwell, US 724,909; Herbulot, US 4,513,601; Schmitz, US 661,109; Stotz, CH 17051; Ritchie, BR 6697; and Pallas, FR 5.118

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. In col. 6, lines 13-16 Rouillot and in col. 4, lines 8-11, Smiley et al disclose the advantages of providing a hollow shaft with filler material.

Art Unit: 3679

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached Monday through Thursday from 9:30 am to 7:00 pm. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne, can be reached on (703) 308-1159. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 (before final), (703) 872-9327 (after final) and (703) 872-9325 (customer service).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.



**GREGORY J. BINDA
PRIMARY EXAMINER**